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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,315	07/18/2003	Yoshimoto Matsuda	ACO 351	4340
50488	7590	04/11/2006	EXAMINER	
ALLEMAN HALL MCCOY RUSSELL & TUTTLE LLP			NGUYEN, TU MINH	
806 SW BROADWAY			ART UNIT	
SUITE 600			PAPER NUMBER	
PORTLAND, OR 97205-3335			3748	

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/622,315

Applicant(s)

MATSUDA, YOSHIMOTO

Examiner

Tu M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11,13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. An Applicant's Amendment filed on October 17, 2005 has been entered. Claims 5 and 12 have been canceled; and claims 1, 2, 4, 6, 8-11, 13, and 14 have been amended. Overall, claims 1-4, 6-11, 13, and 14 are pending in this application.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindstedt (U.S. Patent 5,109,668).

Re claim 1 and 4, as shown in Figure 1, Lindstedt discloses an exhaust pipe collecting structure for a multi-cylinder engine unit having multiple cylinders, in which exhaust pipes (16, 18, 20, 22) extend from at least four cylinders of the multiple cylinders and are collected into one exhaust passage (148) at a location downstream of the exhaust pipes in a flow of exhaust gases, the structure comprising:

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- a first exhaust pipe group (16, 18) and a second exhaust pipe group (20, 22) each of which is comprised of two exhaust pipes selected from four exhaust pipes respectively connected to the four cylinders at upstream end portions thereof;

- a first exhaust sub-collecting pipe (56) cast integrally with the first exhaust pipe group and configured to collect two exhaust pipes of the first exhaust pipe group to integrally form one exhaust passage;

- a second exhaust sub-collecting pipe (58) cast integrally with the second exhaust pipe group and configured to collect two exhaust pipes of the second exhaust pipe group to integrally form another exhaust passage;

- a first joint portion (50) cast integrally at a downstream end portion of the first exhaust sub-collecting pipe; and

- a second joint portion (52) cast integrally at a downstream end portion of the second exhaust sub-collecting pipe, the second joint portion being arranged in parallel with the first joint portion; and

- a connecting tube (148) located downstream of the first and the second joint portions for allowing the exhaust gases flowing through the exhaust passages inside the first and the second joint portion to be led into a common exhaust passage (148).

Lindstedt, however, fails to disclose that the first joint portion, the second joint portion, and the connecting tube are joined by a fastening device.

With regard to the limitation of said first joint portion, the second joint portion, and the connecting tube being joined by a fastening device, a product by process claim which is rejected over a prior art product that appears to be identical, although produced by a different

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process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Re claim 6, in the structure of Lindstedt, the connecting tube (148) includes two parts having a joint surface at which the two parts are joined to each other, the joint surface extending along a longitudinal direction of the connecting tube, as clearly shown in Figure 1.

Re claim 7, in the structure of Lindstedt, the first (56) and second (58) exhaust sub-collecting pipes and the connecting tube (148) have double-walled structures to have cooling passages between walls.

4. Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. (U.S. Patent 6,122,911).

Re claim 1 and 4, as shown in Figure 2, 9, and 10, Maeda et al. disclose an exhaust pipe collecting structure for a multi-cylinder engine unit having multiple cylinders, in which exhaust pipes (152, 154, 156, 158) extend from at least four cylinders of the multiple cylinders, the structure comprising:

- a first exhaust pipe group and a second exhaust pipe group each of which is comprised of two exhaust pipes selected from four exhaust pipes respectively connected to the four cylinders at upstream end portions thereof (as clearly shown in Figure 2);

- a first exhaust sub-collecting pipe (not numbered but clearly shown in Figure 2) cast integrally with the first exhaust pipe group and configured to collect two exhaust pipes of the first exhaust pipe group to integrally form one exhaust passage;

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- a second exhaust sub-collecting pipe (not numbered but clearly shown in Figure 2) cast integrally with the second exhaust pipe group and configured to collect two exhaust pipes of the second exhaust pipe group to integrally form another exhaust passage;

- a first joint portion (not numbered but clearly shown in Figure 2) cast integrally located at a downstream end portion of the first exhaust sub-collecting pipe; and

- a second joint portion (not numbered but clearly shown in Figure 2) located at a downstream end portion of the second exhaust sub-collecting pipe, the second joint portion being arranged in parallel with the first joint portion;

wherein the first joint portion and the second joint portion are joined to each other to allow the first and second exhaust sub-collecting pipes to be integral with each other as seen from outside, an exhaust gas discharged from the first exhaust pipe group is led into the exhaust passage of the first joint portion and an exhaust gas discharged from the second exhaust pipe group is led into the exhaust passage of the second joint portion, and exhaust passages inside the joint portions are arranged adjacently (see Figure 10).

Maeda et al., however, fail to disclose that the exhaust pipes (152, 154, 156, 158) are collected into one exhaust passage at a location downstream of the exhaust pipes; and that the first joint portion, the second joint portion, and the exhaust passage are joined by a fastening device.

It is well known to those with ordinary skill in the art that the four exhaust pipes in Maeda et al. are collected into one exhaust passage at a location downstream in order to have the exhaust gas purified by a single catalytic converter. Therefore, it is at least obvious to one with

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ordinary skill in the art that the four exhaust pipes in Maeda et al. are collected into one exhaust passage at a location downstream.

With regard to the limitation of said first joint portion, the second joint portion, and the exhaust passage being joined by a fastening device, a product by process claim which is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Re claim 2, in the structure of Maeda et al., as illustrated in Figure 10, the first joint portion has a first semicylindrical peripheral wall having an opening opened toward the second joint portion with a joint face defining the opening and extending along a direction of the flow of the exhaust gases, the second joint portion has a second semicylindrical peripheral wall having an opening opened toward the first joint portion with a joint face defining the opening extending along a direction of the flow of the exhaust gases, and the first and second semicylindrical peripheral walls are joined at the joint faces thereof to be formed into the one cylindrical exhaust passage such that the opening of the first joint portion and the opening of the second joint portion face each other.

5. Claims 3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. as applied to claims 2 and 4, respectively, above, in view of Mashiko et al. (U.S. Patent 6,454,622).

Re claim 3, the structure of Maeda et al. discloses the invention as cited above, however, fails to disclose a rubber tube that covers an outer periphery of the first and second semicylindrical peripheral walls that are joined to face each other.

As shown in Figure 43, Mashiko et al. teach the use of rubber tube (390) that covers an outer periphery of a connection section of the four exhaust pipes. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the rubber tube taught by Mashiko et al. in the structure of Maeda et al., since the use thereof would have provided an excellent thermal insulation to the exhaust collecting structure.

Re claims 6-7, in the modified structure of Maeda et al., as shown in Figure 41 of Mashiko et al., the connecting tube (240c) includes two parts having a joint surface at which the two parts are joined to each other, the joint surface extending along a longitudinal direction of the connecting tube; wherein the first and second exhaust sub-collecting pipes (238c1-238c4) and the connecting tube have double-walled structures to have cooling passages (240d) between walls.

***Allowable Subject Matter***

6. Claims 8-11, 13, and 14 are allowed.

***Response to Arguments***

7. Applicant's arguments with respect to the references applied in the previous Office Action have been considered but are moot in view of the new ground(s) of rejection.



*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

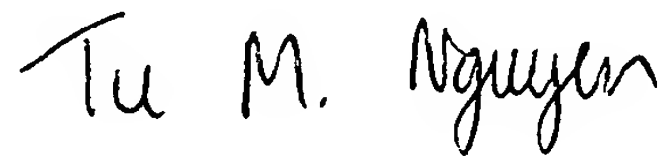
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Communication*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TMN

Tu M. Nguyen

January 20, 2006

Primary Examiner

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